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A BRIEF HISTORY OF **MOTOROLA**

*STAR TREK, MOON MEN
AND 80-PLUS YEARS OF
OUT-OF-THIS-WORLD
INNOVATION*



**OUR FIRST
IMPRESSIONS OF
APPLE'S NEXT-GEN
MACBOOK PRO**

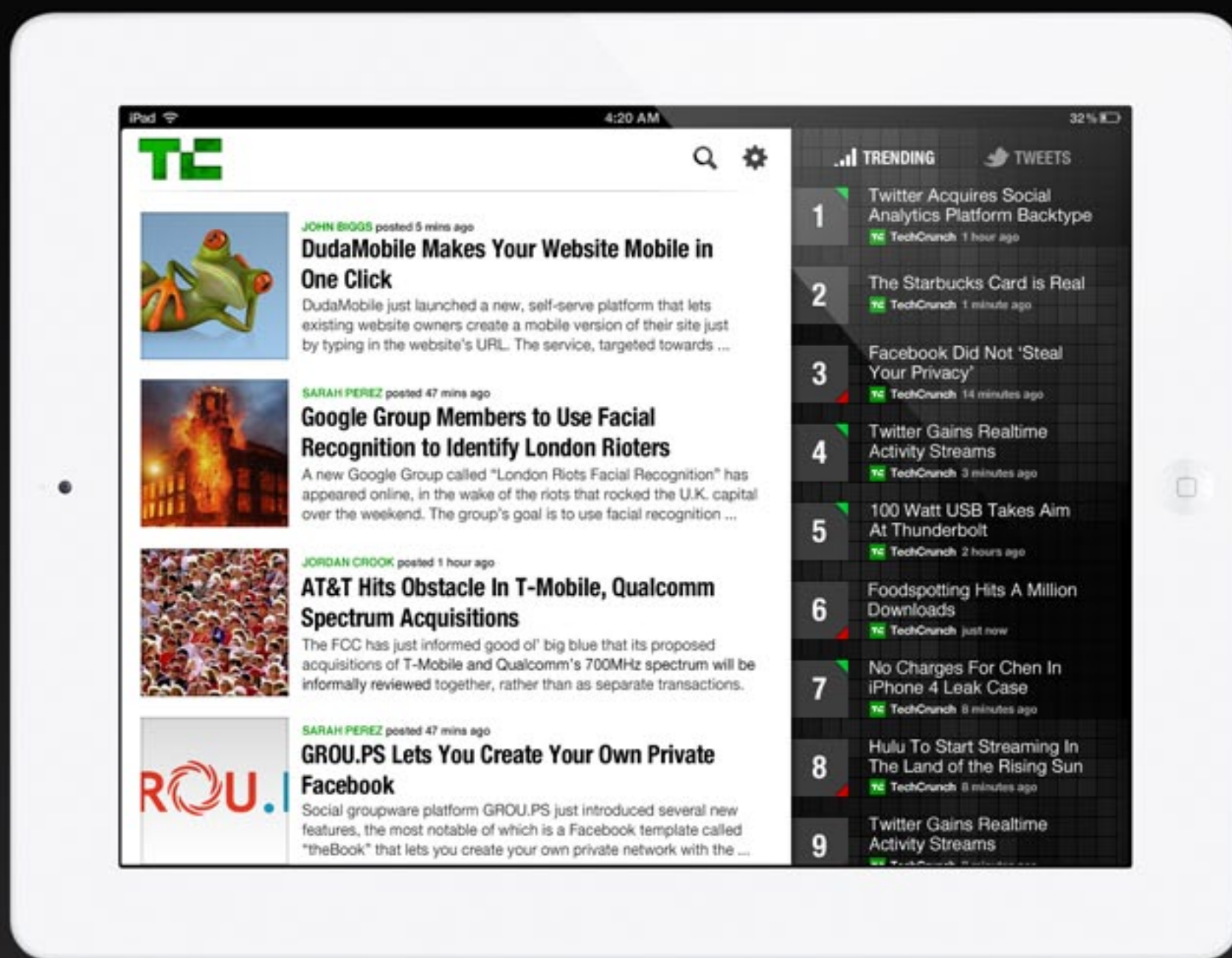
**PUTTING
SONY'S XPERIA
HANDSETS
TO THE TEST**

**10 BIG
BREAKOUTS
FROM
WWDC 2012**



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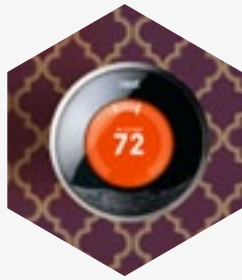
06.15.12

TABLE OF CONTENTS

ENTER



EDITOR'S LETTER
Apple Delivers, Can Google Respond?
By Tim Stevens



EYES ON
Nest Thermostat



HANDS ON
Apple's Next-Generation MacBook Pro



WEEKLY STAT
Smartphones: Gateway to the Tablet
By Jon Fingas



REACTION TIME
Wink If You've Seen the Future
By Ludwig Kietzmann

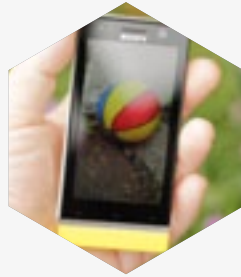


REC READING
Looking for Marshall McLuhan, the Death of webOS and More
By Donald Melanson

REVIEW



Sony Xperia P
By Mat Smith



Sony Xperia U
By James Trew

FEATURES



Motorola: A Brief History
By Brian Heater



10 Big Breakouts from WWDC

ESC



VISUALIZED
The View from the International Space Station



Q&A
Heroes Creator Tim Kring



SWITCHED ON
Going Thermo-nuclear
By Ross Rubin



REHASHED
WWDC, Readability and Pinte-what?



TIME MACHINES
Ancient Gears

On the Cover:
Photograph by Marshall Troy for Distro



APPLE DELIVERS, CAN GOOGLE RESPOND?



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06.15.12

EDITOR'S
LETTER

As our virtual pages go to print, Apple's WWDC is drawing to a close, but the influx of news from its keynote was so massive that nearly every other company in the tech world opted to sit on their major announcements for at least another week. So, forgive me if I spend a lot of time talking about Macs and such.

And there are plenty of new Macs to talk about, but far and away the most important is the new MacBook Pro with Retina display. Yes, that's the official name for the thing, at least for now, revealing its most major new update: a stunning display. At 2880 x 1800, this the highest-res consumer laptop of all time and, thanks to maximum power from a quad-core Intel Core i7 processor and NVIDIA Kepler GT 650M graphics, it has plenty of oomph to power those pixels.

Perhaps even more impressive is the thickness of the thing: just 0.71 inches. That's only fractionally greater than a 13-inch Air, but unlike that svelte system the new Pro does not taper — it's 0.71 inches all the way across. It's also noticeably heavier, at just under 4.5 pounds. This, then, isn't the 15-inch Air we've all been waiting for, slotting in neatly between the current Air and the older-style Pro — and doing so without giving up any of the power of Apple's professional line of laptops.



Really the only thing it does give up is an optical drive. When Apple ditched ROM support on its Mac mini we said that was a bad move — we still use discs quite often on the home front. But, on the road, in our laptops, we can do without. I travel with an Air and, while I have the external USB drive, I've never bothered to bring it on the road.

Apple refreshed its entire line of MacBooks. The Air was updated with faster and bigger SSDs (up to 512GB), Ivy Bridge processors, USB 3.0 and, sadly, the new MagSafe 2 connector, which is slightly slimmer than and rather less compatible with the old MagSafe. The traditional MacBook Pro line also got faster chips and USB 3.0, but must still make do with the old, *impossibly* fat MagSafe connector.

Speaking of old, the Mac Pro desktop is also now offering Ivy Bridge processors, but that was the only update for the ageing line. Apple didn't even mention the series during the keynote as, indeed, it seems the company is fully embracing a more mobile lifestyle. That said, we're told a proper update is coming sometime next year, and hopefully the Air line will receive a Retina upgrade at the same time. Presumably the traditional, optical-endowed Pro line will expire right around then.

And what of the software? Being a

“There are plenty of new Macs to talk about, but far and away the most important is the new MacBook Pro with Retina display. Yes, that's the official name for the thing...”

developer-focused event, Apple predictably had plenty of that to show off. The company unveiled iOS 6 and, with that, comes a few choice upgrades for Siri. She can now give sports scores and some other athletics-related information that threatened to put the room full of eager Apple fans to sleep during the demonstration. More importantly, she can now give you full turn-by-turn directions in the company's new Maps application.

It's a huge update to the app and a clear move to take on Google on another front. From what little we saw of the demo shown during the WWDC keynote, it should be a very successful one. No single feature was revolutionary compared to Google's offering (and the current lack of transit directions is a definite drawback), but the whole pack-




age looks clean and fast — and perhaps that's because of the limited compatibility. The 4S will be the only iPhone able to do turn-by-turn directions, though if you care to lug your tablet along you can also get directions on either the iPad 2 or the new iPad.

Another cool new feature of iOS 6 is called Passbook. Basically, it replicates the functionality of any of the dozens of membership card aggregators, letting you create a virtual wallet in the interest of cleaning up your physical one. In addition to things like Starbucks cards, tickets from Fandango, Amtrak and United can be loaded in here, making it easy to get on your plane or into a nice venti mocha Americano. The interface is clean but the real determination of success here will be the number of partners who sign on. We're hoping all the major airlines will have checked in before iOS 6 drops later this year, and maybe NFC support too.

We also got a release date for Mountain Lion, the 10.8 release of OS X, and a price. The next big cat will ship sometime in July and will cost just \$20. That's \$10 cheaper than Lion.

In this week's Distro we have hands-on impressions with the new MacBook Pro and we'll give you even more details on what happened at WWDC. We also have full reviews of Sony's latest smartphones, the Xperia

“Siri can now give sports scores and some other athletics-related information that threatened to put the room full of eager Apple fans to sleep during the demonstration.”

P and U, and Brian Heater takes you on a visual history of Motorola. Ludwig Kietzmann looks back at the future of gaming, as portrayed by this year's E3, and Ross Rubin's Switched On applauds just what WWDC meant for Android. Finally, *Heroes* creator Tim Kring does Q&A, clearing up any remaining mysteries about his own gadget affinities. As we wind down from WWDC and get amped for Google I/O, we hope you enjoy another great issue of Distro. 



TIM STEVENS
EDITOR-IN-CHIEF,
ENGADGET



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EYES-ON

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NEST THERMOSTAT

Tap for detail

A CERTAIN SHEEN

GET SMART,
KEEP IN TOUCH

THE DESIGN:

It may not be the flashiest device in your connected home, but it sure beats a beige box. Billed as “the learning thermostat,” Nest is packed full of sensors to pick up on your behavior and automatically adjust the temperature accordingly.

THE BILL:

\$250 (before
installation)

GREEN
LEAF



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EYES-ON



A CERTAIN SHEEN

The Nest's 1.75-inch LCD display is housed in a stainless steel shell, which reflects the surface that it's attached to, thus camouflaging the thermostat.

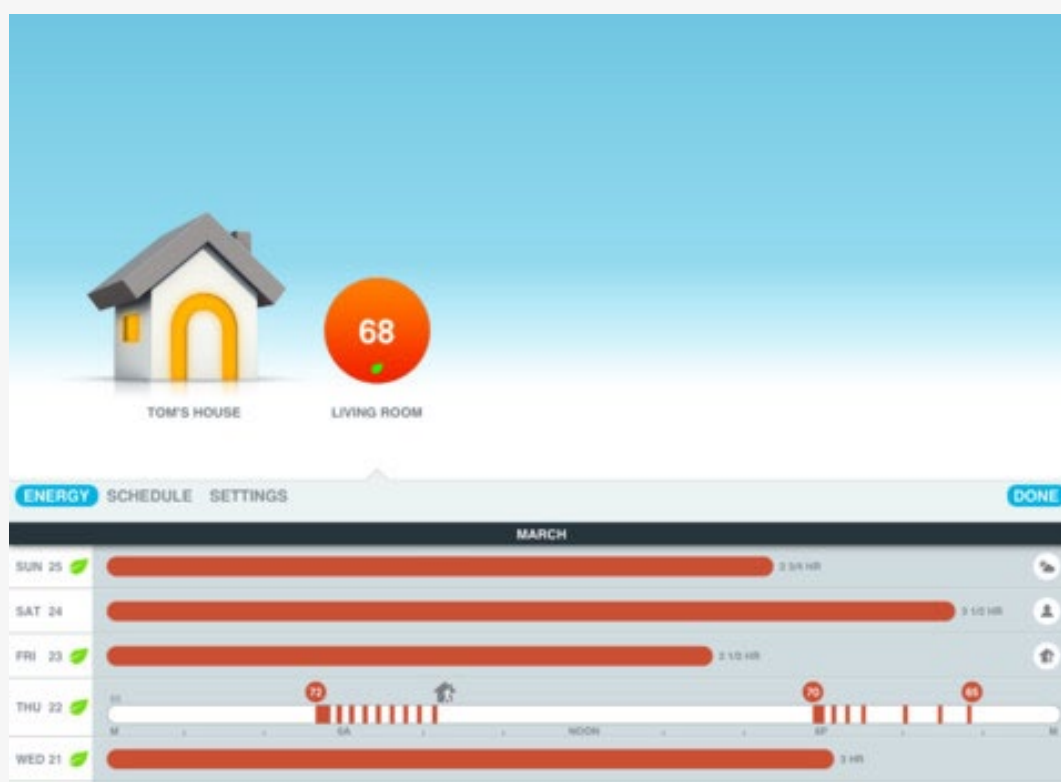
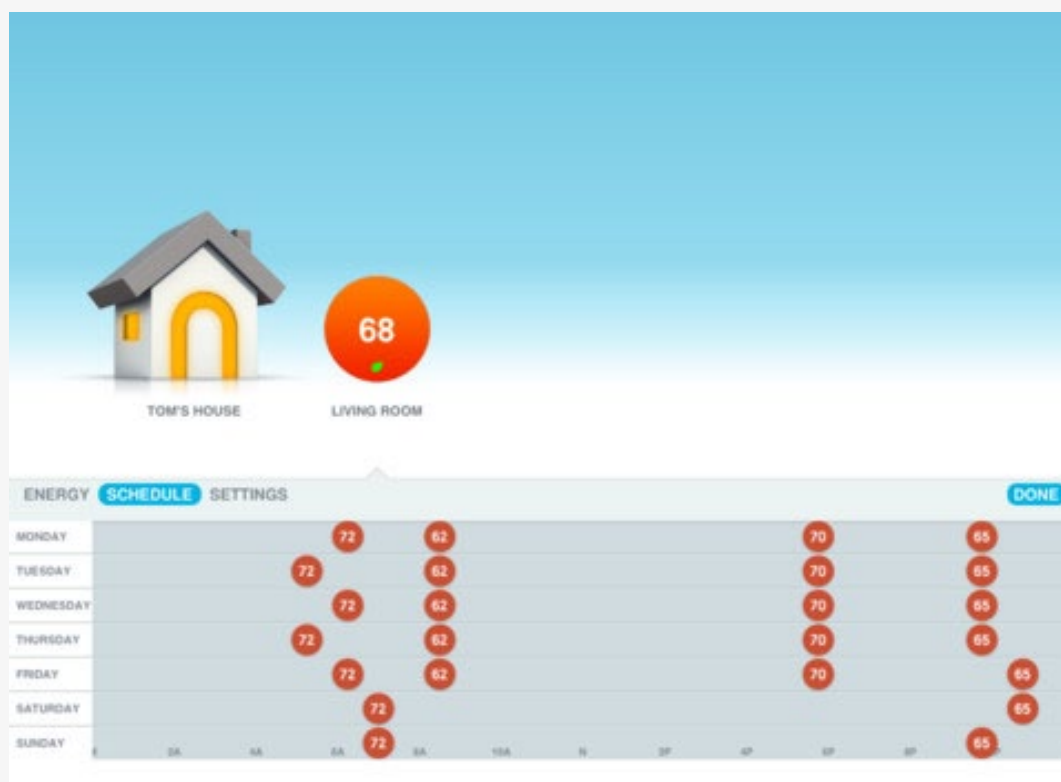


**GET SMART**

Nest contains a collection of sensors for temperature, humidity, proximity, far-field activity, near-field activity and ambient light, which, in conjunction with a set of algorithms, make up the brains of the device. Known as Nest Sense, these features allow the heat keeper to learn your behavior and automatically adjust the temperature to suit you.

KEEP IN TOUCH

While Nest is built to sense your absence and shut off about two hours after your departure, you can still control the heat in your home while you're away via the company's website or an Android or iOS app.



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EYES-ON



GREEN LEAF

The unsurprisingly branded Nest Leaf icon pops up when you switch to a temperature that's "energy efficient," in an attempt at a student-becomes-the-teacher switcheroo. It also shows you how long it will take to reach your desired temp.





APPLE NEXT-GENERATION MACBOOK PRO

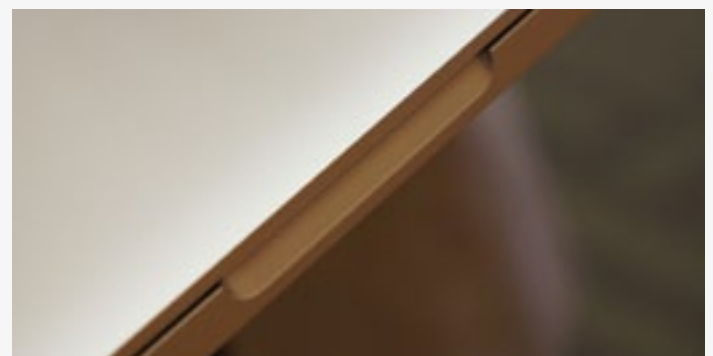
Not satisfied looking at the latest and best Mac that Apple has ever made under glass? Neither were we, so we tracked one down, ripped it out of its box and stacked it up against the last-generation MacBook Pro 15-inch. How does it compare? Can it compare? Is the new MagSafe 2 connector going to mean you need all new adapters? And, just how amazing is that Retina display? You'll have to read on to find out.

It's immediately apparent that this thing isn't the 15-inch MacBook Air that we've all been hoping for. But, then again, neither is it a traditional MacBook Pro. This is something that slots in between the two current devices and, we'd say, does so quite cleanly — though honestly we can't imagine anyone wanting the O.G. Pro with an optical drive after touching this thing.

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It's 0.71 inches thick, or roughly 25 percent thinner than the current generation Pros (which, by the way, live on — except for the 17-incher). That's just 0.03 inches thicker than the 13-inch MacBook Air, but it feels like quite a bit more. Where the Air is tapered, this has a constant thickness throughout. So, again, it doesn't feel like an Air, but it's a big improvement over the Pro.

On the right side you have an SD card reader, full-size HDMI port and the first USB 3.0 port. (Which, by the way, is not blue — Apple just made both the ports 3.0 and they're all naturally white.) On the other side is the other USB 3.0 port along with dual Thunderbolt ports, a headphone jack and the new MagSafe 2 connector.

Now, about that connector. Your old power adapters will not work with the new MacBook Pro and your new MacBook Pro adapter will not work with your old Macs. That's a little irritating, but hey, it's progress folks, get with it — or buy the \$9.99 adapter that will let you use your old plugs with your new Macs.

And that display? It's gorgeous. If you've had the opportunity to compare the new iPad to the old iPad you'll know the kind of leap forward we're talking about here. It's that much better, but it isn't just resolution. Contrast seems greater and viewing angles too. We'll need more time to do a thorough analysis, but we can say with confidence this display doesn't disappoint.

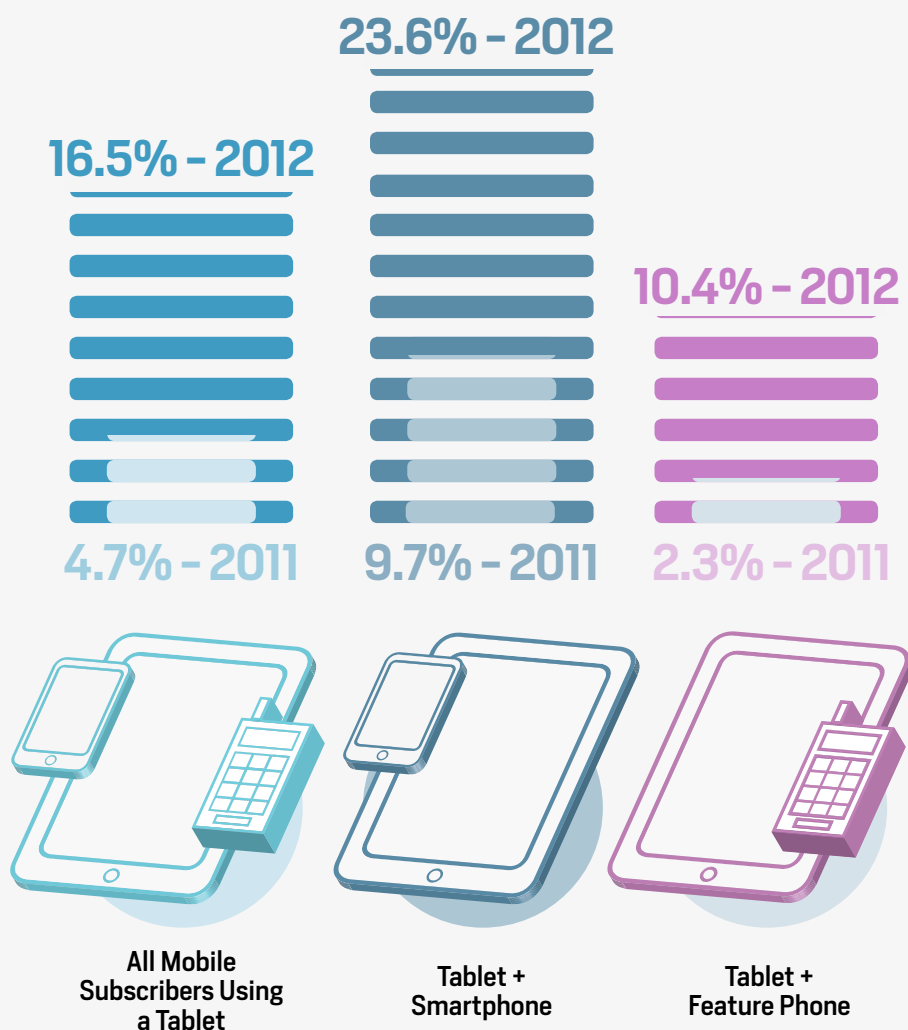
Neither does the rest of the machine. We have a lot of benchmarking to do and we can't wait to get to it, so we'll bring this to a close and dig in with this, the next-generation MacBook Pro. 



The Smartphone: Gateway to the Tablet

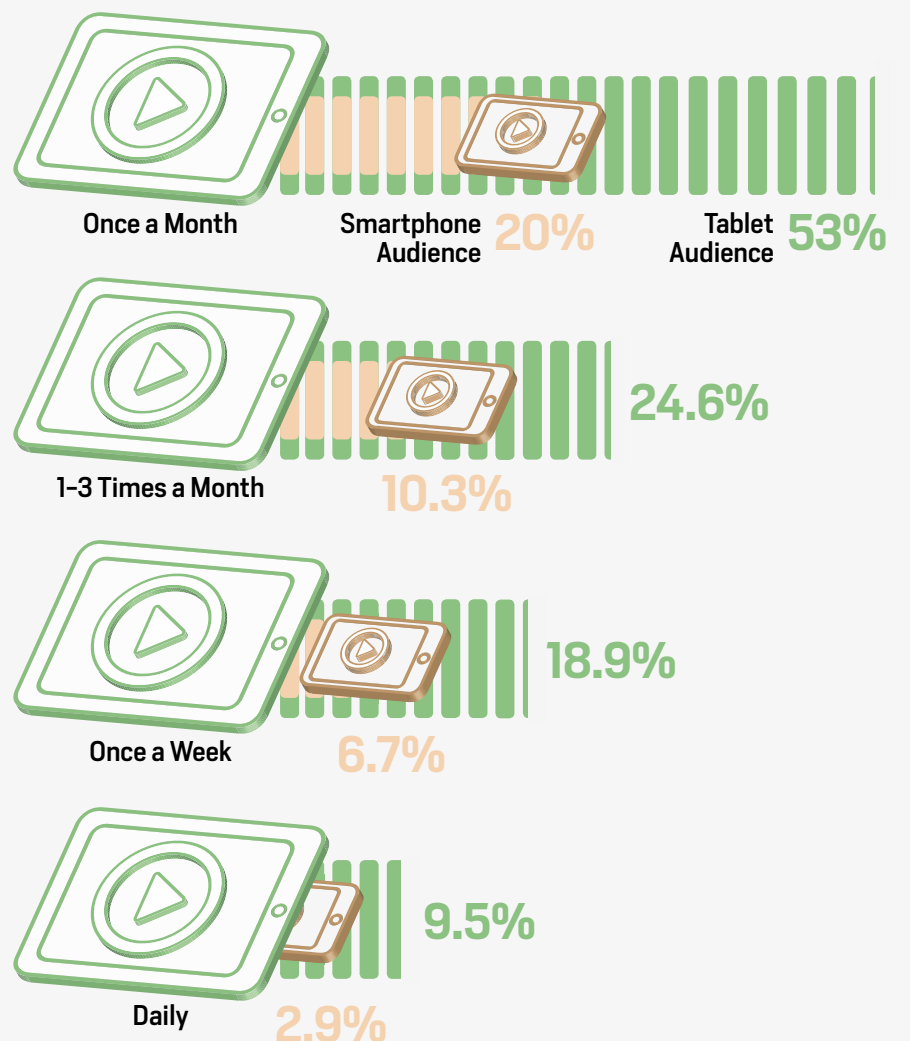
If you've got a smartphone, it's increasingly likely that you're also carrying a tablet as a sidearm. According to ComScore, 23.6 percent of American smartphone owners also have an iPad, Kindle Fire or some other large touchscreen slab as of April. That's only 16.5 percent of all mobile subscribers in the land, but that's a huge jump from 9.7 percent of smartphone owners (4.7 percent of total mobile subscribers) just one year earlier.

Mobile Users Who Also Use a Tablet



And if you do own a slate, odds are that you're watching your fair share of movies and cat videos. More than half of tablet users, 53 percent, fire up the likes of Netflix or YouTube at least once a month, with almost a tenth (9.5 percent) tuning in daily. Tablet lovers are unsurprisingly three times more likely to watch than their smartphone counterparts, suggesting that it's just a short hop from buying a tablet to catching up on *Daily Show* episodes. — By Jon Fingas

Tablet vs Smartphone Video Viewing



WINK IF YOU'VE SEEN THE FUTURE

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REACTION
TIME

BY LUDWIG KIETZMANN

E3 is always on the verge of devolving into a chaotic, inescapable din of competing mega-screens and marketing megaphones yelling over each other. Everyone is selling their own piece of the future. That's why, whether intentional or not, this year's show felt weirdly and stubbornly on message, as if a tacit agreement between every manufacturer and publisher ensured that nobody would step out of the here-and-now. If a gnawing absence of surprise and excitement pervaded the show, it's because everything we saw and discussed is expected to come out within the next 12 months.

Ubisoft was willing to venture much further into the future, surprising attendees at its own press conference with a snippet of *Watch Dogs*, a game that seemed too good to be true amongst E3's barrage of solid sequels. Here was a new intellectual property, with a serious and topical premise, and



Watch Dogs presents a new title and excellent graphics



Many games became unwitting entrants in E3 2012's most visceral competition: Which character excelled the most at stabbing necks?

graphics too sophisticated to be running on a console from 2005. It's okay to talk about the next generation, apparently, as long as you don't explicitly call it that.

Running on a high-end PC with an Xbox-compatible controller, the *Watch Dogs* demo trails Aiden Pearce, a man obsessed with modern surveillance and communication networks. His smartphone, plucked discreetly from his coat pocket, becomes a vector for anarchy as he pries into the personal profiles of people nearby, blocks cell reception and disturbs traffic signals to complete an assassination. His mission degenerates into a shootout between stranded vehicles (an inevitability that might support the argument that this game belongs in the current market) and eventually shows him into fleeing from the police. The camera pulls away, farther and farther, to reveal another mysterious (and playable!) onlooker on top of a nearby building — another agent, presumably, in Pearce's cabal of hackers. It's a breathtaking urban shot, and it seems

DISTRO GAME RELEASES FOR THE WEEK OF JUNE 15

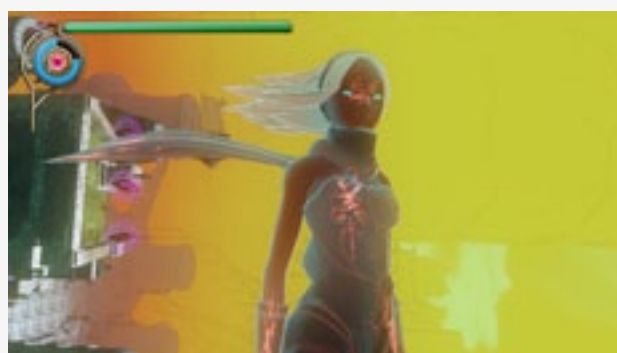


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PlayStation Vita - \$40



a little too slick for what we've come to expect from the ol' Xbox 360 and PlayStation 3.

Ubisoft's official stance, of course, is that the game is coming to PC, PlayStation 3 and Xbox 360 "for sure." I fully expect the French monolith to release versions of *Watch Dogs* for older platforms — with less sophisticated lighting, textures and rendering techniques — but they'll appear noticeably inferior to E3's impressive presentation. Financial prudence demands that such an ambitious game be offered to large, entrenched audiences, even while it's also striding out alongside new hardware with a small starting base.


Did Ubisoft win E3, then? The company has smartly seized the real promise of the annual exposition, of seeing an exciting glimpse at the industry's long-term trajectory, to position itself as a de facto leader in what we know of the next wave of games. Others will follow, bringing their major franchises and characters along, but there's immense value in being the source of surprise and vision at E3. People talk about you.

It's not that there's no excitement to be extracted from the familiar anymore. *Halo 4* is shaping up to be a welcome augmentation of Microsoft's most important franchise, and *Tomb Raider*'s gritty (and controversial) survival tale may purify a well that's been poisoned ever since someone dropped *The Angel of Darkness* in there. But the loud, flashing context of E3 suppresses the



KRATER
PC - \$15

achievements of those games, compressing them into slick trailers that all end with SOMETHING FLYING AT YOU AND THEN AN "INCEPTION" HONK AND THEN TITLE SCREEN. And if it wasn't that, many games became unwitting entrants in E3 2012's most visceral competition: Which character excelled the most at stabbing necks?

The unnecessary levels of presentation that seem so necessary at E3 deserve the brunt of that criticism, more so than the games themselves. The marketing machine is in control, and snaps its fingers to keep your attention locked to the games — the products — that'll be on shelves within the next few months. I understand it fully, but I can't help but think it's one of the reasons that every expo seems more curtailed and less ambitious than the last one. If you want to talk about the real future at E3, you have to do it with a wink. 





Looking for Marshall McLuhan in Afghanistan

by Rita Leistner
Literacy Review of Canada

As Rita Leistner explains in the introduction to this 12-part series for the *Literacy Review of Canada*, “Once you start looking for McLuhan, it’s impossible not to see traces of him everywhere.” Even in Afghanistan, where Leistner spent three weeks last year embedded with a United States Marine Corps battalion as part of Project Basetrack, an experiment in using new technologies and social media as an extension of war reporting. The Marshall McLuhan spark, so to speak, came from Leistner’s use of one of those new technologies: an iPhone 4 loaded with the Hipstamatic camera app. She realized this had profoundly changed her coverage of the war — both through the device itself and the resulting nostalgia-tinged photographs, and also by making her more aware of all of the technology surrounding her.

PHOTO CREDIT: RITA LEISTNER/BASETRACK.ORG

**Pre to Postmortem:
The Inside Story of the
Death of Palm and webOS**
by Chris Ziegler
The Verge

Certainly the most extensive history of Palm before and after its acquisition by HP to date, this piece from Chris Ziegler draws on interviews with a number of current and former employees to chart the rise and fall of one of the pioneers of mobile computing, and the legacies it’s left.

What Happened to Cyberpunk?
by Claire Evans
Vice Motherboard

There’s been a slight resurgence of cyberpunk talk as of late, and Vice’s *Motherboard* website has now gotten in on the act as well with a short series of articles led off by this piece from Claire Evans, which set out to find where cyberpunk went and found evidence of it all around us.

The War for India’s Internet
by Rebecca MacKinnon
Foreign Policy

Rebecca MacKinnon looks at the state of the growing battle over internet censorship in India, a country where only 10 percent of the population is online, and where sites like Vimeo are already blocked and both Facebook and Google are facing trial for their failure to remove content.

Can Phil Schiller Keep Apple Cool?
by Peter Burrows
and Adam Satariano
Bloomberg Businessweek

There was plenty written about Apple in the lead-up to the big Worldwide Developer Conference this week, but this piece on one of its less-discussed executives proved to be one of the most worthwhile, offering a portrait of Senior VP Phil Schiller and the influence he has within the company.



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REVIEW

DISTRO
06.15.12

CONTENTS



Sony
Xperia
P



Sony
Xperia
U



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06.15.12

REVIEW

SONY XPERIA P



**Can Sony's Xperia P
wow us with all
that WhiteMagic or
will its siblings
steal the show?
By Mat Smith**

A As the middle child from Sony Mobile's NXT family, the Xperia P steps out from behind the Xperia S' shadow with its own 4-inch screen – and a touch of WhiteMagic. Screen technology aside, the phone's design follows a path very similar to Sony's latest flagship and picks up a few quirks of its own on the way. The see-through button strip is actually touch-sensitive on Sony's 2012 middle-weight – a curious oversight on the bigger model.



It packs Sony's 8-megapixel Exmor R camera sensor (likely to be the same one found in the Xperia Arc S), a dual-core 1GHz processor and just under 13GB of user-accessible storage. But there's one unfortunate Xperia trait here – we're still playing with Android Gingerbread, even while its ancestors begin to dip their toes into Ice Cream Sandwich. Does anyone want an incrementally smaller Android phone from Sony? And what exactly is WhiteMagic and what does it mean for the battery life?

HARDWARE

The instant you unfurl the Xperia P from its delicately designed (and presumably eco-friendly) retail box, you'll

think of the Xperia S. Sony's consciously designed the current Xperia trio to match each other, from the squarish corners to the see-through strip that embellishes the base. The Xperia P can shed its lower cap, although this doesn't open up access to anything – the micro-SIM slot exists on the left edge and there's no expandable storage option. Unlike the Xperia U, the notion of exchangeable caps has also been overlooked – the phone will arrive with the single, matching cap – and you'll have to hope a friend's willing to swap if you're looking to shake up the design. While the majority of the back is hewn from aluminum, both the aforementioned cap and a region on the top edge



Yep, that clear strip is a touch-sensitive surface.



miss out, coated instead with plastic. It's just off-color from the aluminum bulk, tempering what is otherwise a fine-looking handset.

The phone is a little thicker (10.5mm) than what we're starting to become accustomed to, but it's nigh-on identical to the Xperia S. Due to the smaller 4-inch (540 x 960) screen, it feels more at ease in the hand. In general, the phone makes a lot of ergonomic sense. All the physical buttons are placed on the right edge, with the two-stage camera shutter appearing where it would on any typical point-and-shoot. It's joined by the volume rocker, the power switch and a metallic mesh guarding the loudspeaker. The grill is curiously parallel to the curved edge, not the flatter front face, but it's a minor curio. On the opposite side, there's the micro-HDMI and micro-USB port. The micro-SIM slot is accessed by removing a pretty flimsy cover that feels like its made of the same aluminum material of the phone, but looks oddly out of place.

The curved backing includes the primary camera sensor (there's a VGA camera on the front) and flash, with a Sony -Ericsson- Mobile icon floating just above the clear strip. Flipping the phone around, the Xperia P's screen is surrounded by a curiously heavy bezel both at the top and bottom. The top bezel includes the ear piece, some slightly crammed-in Sony branding, the front-facing camera and light sensor. It's equally thick below the screen,

and while this gives the phone a sense of balance (and congruence to its relatives), the result is a waste of space.

SCREEN

While the phone beams out from a 4-inch TFT display, Sony's added its own additional white subpixel to the typical RGB setup and they call it "WhiteMagic." What does this mean in real life? Well, you won't need to swing the brightness level to full whack to use it. Even better, at full brightness, this is the most readable screen we've ever used outdoors. In



Automatic scene mode saves you from fretting over settings.



the middle of a sudden heat wave in the UK, the Xperia P is able to push enough effort into that extra subpixel to make a real difference in tricky lighting. Let's take a (much) closer look:

The pixels are pretty densely packed together, explaining the relative crispness, while each RGB group is joined by a white subpixel to improve visibility. The display otherwise behaves like many other recent qHD displays. Color reproduction is excellent, viewing angles are good (and are boosted at higher brightness levels) and it thankfully avoids any discoloration issues at off angles, unlike its AMOLED rivals.

CAMERA

Sony has a pretty good track record with its camera sensors, especially on its middle-of-the-road smartphones. Thankfully, the Xperia P follows this trend, with an 8-megapixel camera capable of crisp images – though you can expect some noise when in lower light. The camera's dynamic range could also do with some work – subjects were often washed out when strong lighting was involved. On the whole, Sony's automatic scene mode is capable of capturing some nice stills without diving into the settings. These include the sweep panorama modes and 3D angled



BENCHMARK	SONY XPERIA P	SONY XPERIA S	MOTOROLA DROID RAZR	HTC ONE X (LTE)
QUADRANT	2,161	2,741	2,357	4,784
VELLAMO	845	2,741	1,021	2,259
ANTUTU	4,965	6,393	6,027	6,956
SUNSPIDER 0.9.1 (MS)	3,010	2,796	2,140	1,453
GLBENCHMARK EGYPT OFFSCREEN (FPS)	19	34	28	56
CF-BENCH	4,855	6,179	6,191	9,479

stills courtesy of Sony's myriad electronics verticals.

Video recording is similarly pleasing. Despite its size, the Xperia P is capable of capturing 1080p video, presumably due to the dual-core processor not seen on last year's Sony phones. For our test, we kept to the 720p setting and the result is a crisp video, with the phone both adjusting to focal and lighting changes quickly.

PERFORMANCE AND BATTERY-LIFE

Sony managed to eke out a respectable performance from its single-core phones, but it's made the change to an ST-Ericsson U8500 dual-core processor here. Our renovated benchmarks prove that it doesn't quite match the dual-core 1.5GHz Qualcomm MSM8260 found inside the Xperia S, but it does give some respectable scores (some less so) that are backed up by our own experiences. Using the

Droid RAZR for dual-core comparison, Sony Mobile's new chip choice doesn't quite equal the competition in raw numbers.

During our typical use, the phone kept up with what we needed it to do. It survived our web browsing sessions and lightweight games with relative ease. The SunSpider score reflects our own experiences – perfectly manageable but not nearly as smooth as other Android phones. It also lacks the graphical punch of the bigger phones. More intensive games *could* run, but weren't all that smooth. Touchscreen controls on a 4-inch display also felt a little tight in this age of bigger screens. Around 13GB of storage is passable for our apps and photos, but the lack of substantial built-in storage or a microSD slot continues to irritate. That's despite Sony continuing to offer 50GB of free cloud storage through Box if you register the device before the end of 2012.

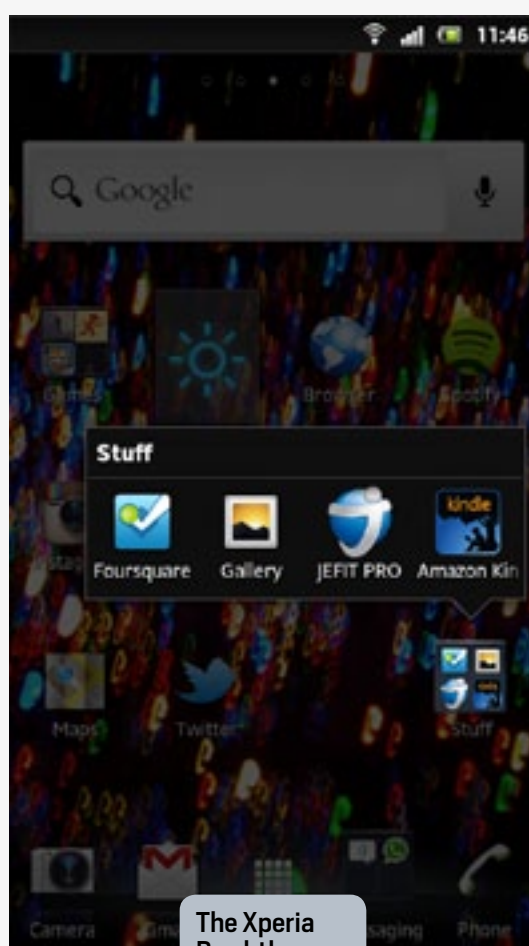
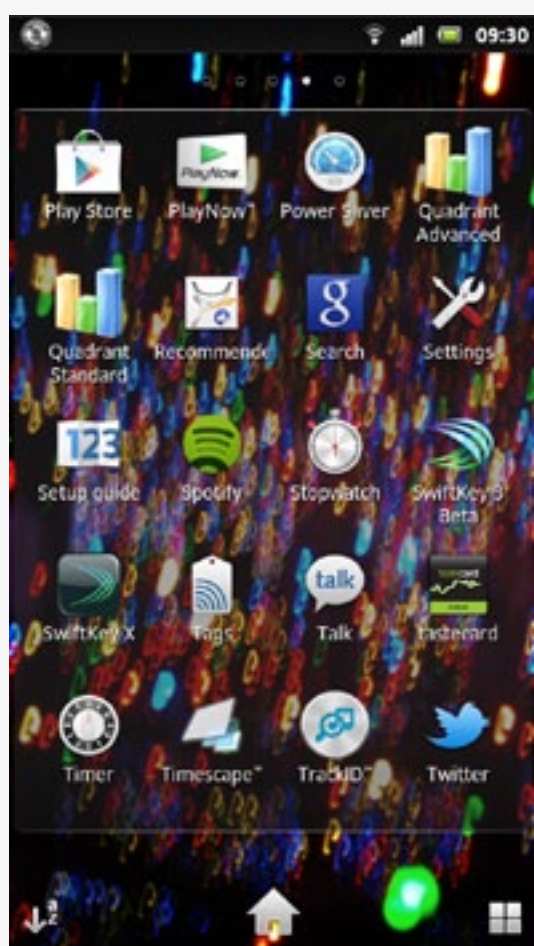


The Xperia P's 1,305mAh battery isn't able to offer up enough hours of on-time for us, though. In our video run-down test, the phone is only able to eke out just over four hours of playback, with brightness set at 50 percent and WiFi on, but not connected. We found ourselves limiting use of the phone during the day for fear it would run out before we got somewhere to charge it – something it often did when we were using it outdoors at higher brightness settings. The battery is also non-removable, which makes it an even bigger bind for those that like to add some insurance with extra batteries. We level the blame at Sony's WhiteMagic display. Presumably, those extra subpixels really take their toll on battery consumption. You'll have to balance out superb outdoor visibility against reduced battery life.

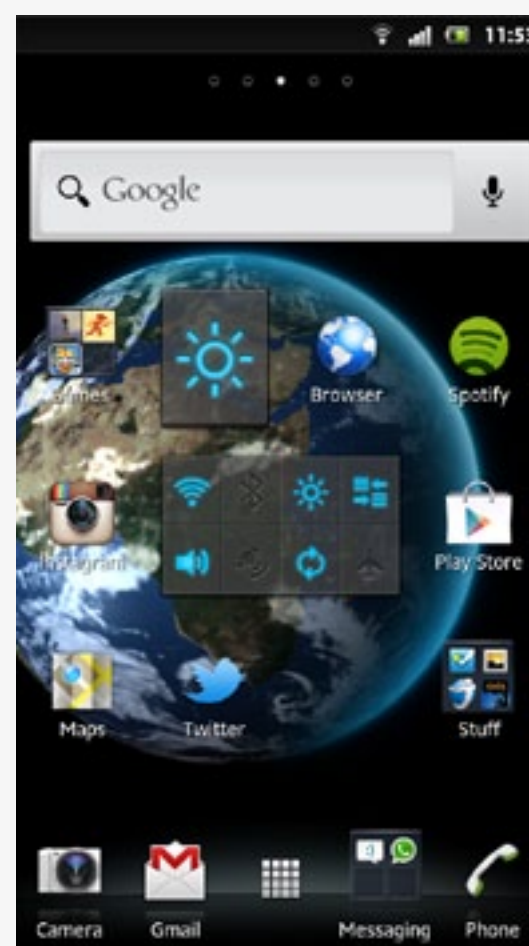
The phone runs on quad-band GPRS (850, 900, 1800, 1900) and HSPA (850, 900, 1900, 2100), with speeds to 14.4 Mbps down and 5.6 Mbps up. In the middle of London, we got speeds of around 4.5Mbps down and 500Kbps up – not superb, but comparable to our other devices in the same location. Call quality is typically strong, with good noise cancellation on busy streets. If anything, the earpiece could benefit from being a little more potent. While our test calls were fine on the other end, we often had trouble hearing their replies in busy situations.

SOFTWARE

And we're back to another frustration – the spectre of late Android iterations. Again, we're handed a new phone, in the middle of 2012, with



The Xperia P subtly disguises the Gingerbread beneath.



Gingerbread. Fortunately, Sony's own tweaks add some extra functionality to it, but these certainly don't come close to the slickness and joined-up design of Google's fourth mobile OS version. Features like text selection and task switching are greatly improved on the 2.3.7 build to which Sony has added its own app folder function and some middle-weight Facebook integration that neatly dovetails your contacts there with your phone book. Like preceding Sony phones, the app tray navigates from left to right, with the ability to sort them by frequency of use, alphabetically and freshness. Sony's app bloat and widgets were relatively unobtrusive (with the exception of the McAfee antivirus program) and are complemented by Google's stock versions – at least we had a choice. The phone also packs similar NFC capabilities to the Xperia S, although it lacks the in-box SmartTags of the bigger device.

Both Sony's Music Unlimited and Video Unlimited media services arrive ready to go on the device, although we have no more willingness to use the stores since we toyed with both on the Tablet P. The Xperia P also misses out on PlayStation certification for some reason – odd given that older devices are now enjoying a limited selection of Sony's gaming catalogue. Like the Xperia S, the phone is ready to share your media, with a mini-HDMI cable even boxed with the phone – likely in exchange for those NFC tags.



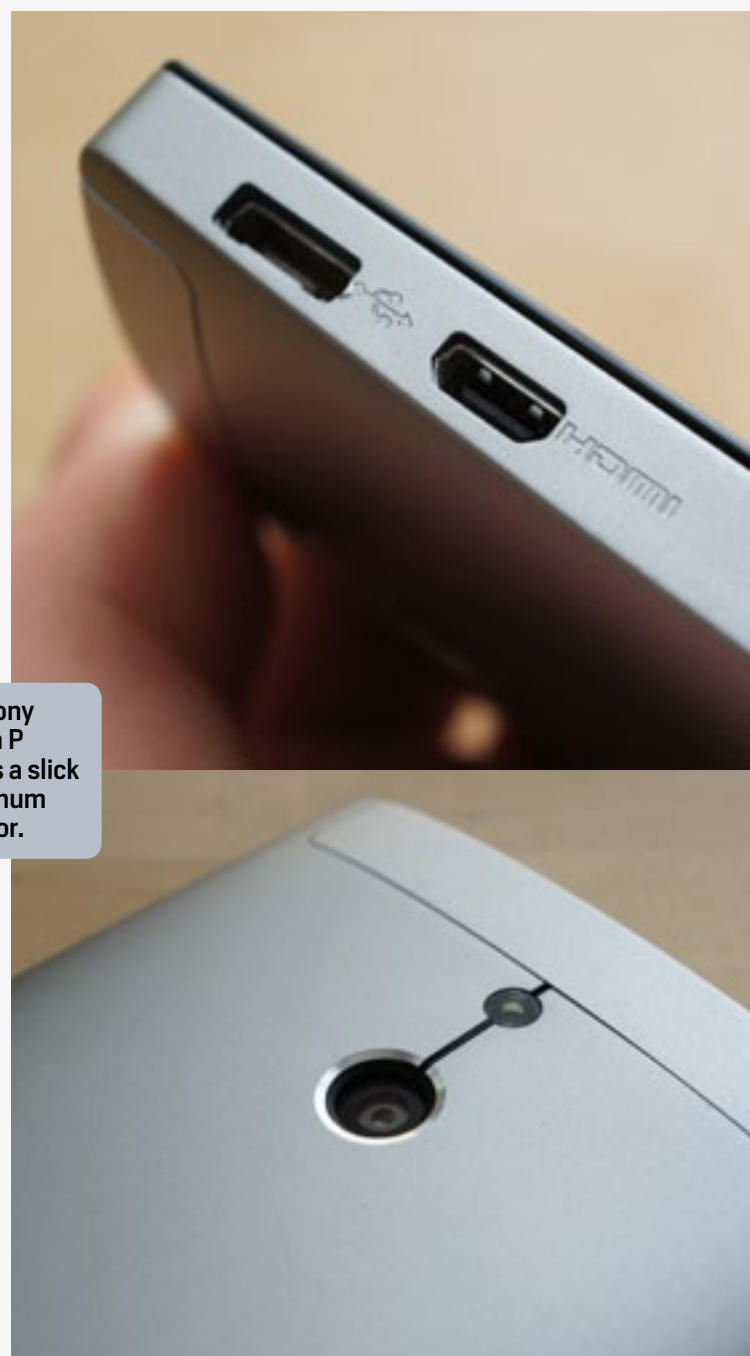
WRAP-UP

The Xperia P is a confident, middle-sized handset, but new smartphone shoppers may find it difficult to spend up to £340 (around \$530; off-contract) on it. While the Xperia P has more design charm and better build quality, the Xperia S is already being substantially discounted in the UK, with a grander camera, larger screen and more capable processor. However, big phones aren't for everyone and the Xperia P's footprint lies closer to the iPhone than recent pocket-testing smartphones. It's



not going to beat the competition on raw benchmark numbers, nor did any lag or hiccups frustrate us during testing – something that other Android phones are still capable of. Another concern is that if someone is looking to buy a small smartphone, they easily could go for the smaller-again Xperia U, which has its own (if slightly brash) design quirks. That shouldn't ruin what the P model can offer; a bright qHD screen that's a revelation in sunlight, with a stable – but tired – OS that's promised an ICS update soon. If Sony can follow up on that promise, then the Xperia P might avoid the slide into obscurity that several of its phones have suffered from. **D**

Mat is a contributing editor who lives in the UK. He's a Liverpool supporter who enjoys obscure Japanese game shows.



The Sony Xperia P sports a slick aluminum exterior.

BOTTOMLINE

**SONY
SONY XPERIA P****£320+**

(approx. \$490+)

PROS

- Superb screen performance outdoors
- Confident, solid design

CONS

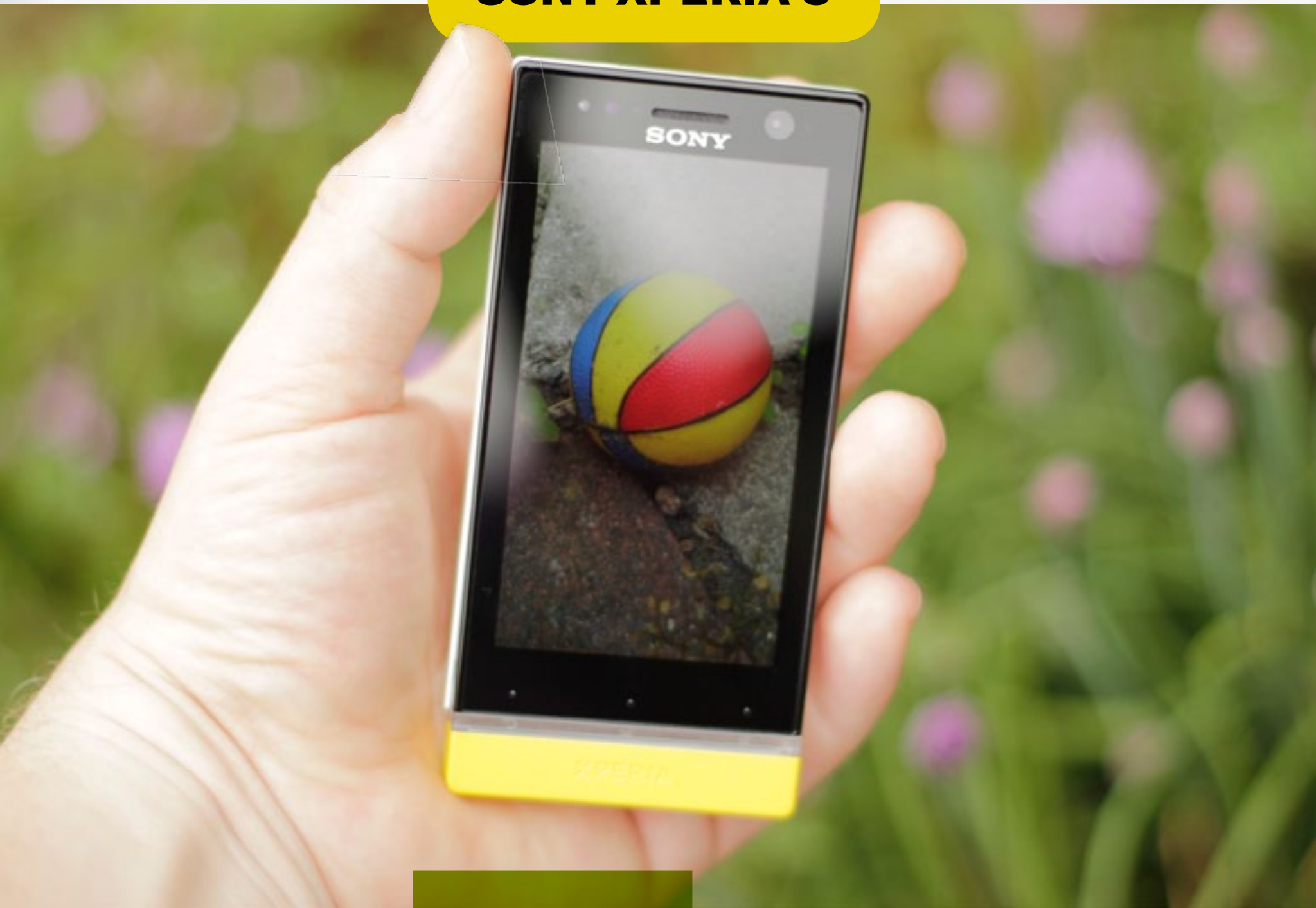
- Battery life disappoints
- Stale Gingerbread OS
- Mediocre processor
- Needs more storage space

BOTTOMLINE

The Xperia P stands behind the flagship S, but surprises with better build quality and a superbly visible screen. Placed squarely in the middle of Sony's smartphone line-up, its battery woes are the main concern.



SONY XPERIA U



Although the smallest in a family of three, the **Xperia U** throws its weight around and does so with style.
By James Trew

There's an oft-used idiom about small packages, which frequently doesn't apply to the world of technology. That's to say that a diminished form factor often doesn't bring the "best things" with it. For example, Sony's NXT family members, revealed between CES and MWC, gifted consumers with the choice of three new handsets: the Xperia P, S and U. The last one in that list is by far the smallest, and in congruence with the general trend of mobile technology, the most lightly armored.

However, we're not ones to make assump-



tions, and heaven forbid we pre-judge something based on size alone. We're as willing to be surprised as anyone, and the new baby of the Sony bunch is as likely a candidate as any to throw us a curveball. Our initial impressions in Barcelona were largely positive, so this review — as the firm says on its marketing material for the phone — is all about (the Xperia) U.

HARDWARE

We're not going to belabor the point anymore, but it's true that the Xperia U is the proverbial runt of the latest litter, measuring 12mm thick with a 3.5-inch display, some way off its larger S and P siblings (4.3-and 4-inches respectively). This equates to a deceptively miniature-looking facsimile of its larger brethren, and, it has to be said, an altogether palm-friendly slab of phone. There's no doubting its heritage though, with the tell-tale geometric design and protruding chin letting you know that this is definitely a Sony.



There's no doubting its heritage though, with the tell-tale geometric design and protruding chin letting you know that this is definitely a Sony.

About that chin. It undoubtedly catches the eye, though we're not sure if it's the bold-colored plastic caps (less striking tones are available) or just the illusion of extra length, but it's certainly a defining characteristic. In fact, along with the distinctive illuminating bar above it, much of the handset's visual character — like it or not — is derived from that bottom end.

The rest of the jet black face does little more than conceal the front VGA camera, speaker grill and sensors. The rear isn't exactly a feature-full landscape either, with a matte finish white battery cover and the usual holes for the camera, flash and speaker keeping the Sony Mobile logo company. The right-hand side is where you'll find all the buttons the Xperia U possesses: power / sleep, volume rocker and camera shutter, leaving the left-hand side bereft of anything bar the micro-USB port. Put this all together, and you get a fairly satisfactory, but not remarkable, slice of phone.



Much like the Xperia S before it — given that the similarities are many — the baby U has its fair share of potentially dust-gathering ridges. The angular design is partly responsible, but the LED bar and removable cap serve up multiple channels for the daily dirt buildup to hide in. It's not terribly problematic, just an unwelcome side effect of the otherwise functional form. The LED bar also poses another tiny problem, at least during your first few days with the phone. Hidden beneath it are the back, home and menu icons that correspond to the touch-sensitive navigation buttons above it.

When whipping the handset out of your pocket to quickly do something, you can find yourself mashing the redundant LED strip (i.e. aiming for the icon) instead. Sure, you'll get used to it soon enough, but it's counter-intuitive to begin with, and only further highlights the curious use of space.

That is until you see the humble, transparent strip's party trick. When browsing images, that innocent piece of plastic will adopt a chameleon-like ability to match the dominant color of your photos and album art. The same is true for the prevailing tone of your theme. When the bar lights-up, it'll be with matching luminosity. Nothing more than a trick, but a cute one nonetheless.

Lastly, that screen. It might not have inherited the WhiteMagic sorcery bequeathed to the Xperia P, but it definitely has no problems making itself seen when drenched in solar gold. That

FWVGA display does have the appearance of being somewhat long, but again, that might be more to do with the dimensions of the phone, rather than the aspect ratio (given that it's bang-on 16:9). We did notice, however, that under direct light, a dotted grid can clearly be seen. This is only while the screen is black or in stand-by, and doesn't affect the quality when in use. In our experience, photos and videos came out brightly with bold colors, and provided a pleasing visual experience, which brings us neatly to...

CAMERA

The Xperia S might be able to boast a double figure megapixel count (12 in fact), but for the U it's firmly back down in the more pedestrian single numbers: five. This might be a good thing, considering the phone only has 8GB of storage, and only four of those are available to the user. You should never be a slave to the peer pressure though, as five megapixels with a good sensor behind it can still be a winning combination. Is that the case here however? All in all, we're saying yes. This isn't a phone that particularly sells itself on its camera credentials, and as such, it just kind of gets on with the job. Give this camera some good, healthy spoonfuls of sunshine, and it'll serve up vivid, reasonably sharp shots. However, snatch some of that light back (or, rather, have conditions do it for you) and the Xperia U starts to get a little upset.



This isn't a phone that particularly sells itself on its camera credentials, and as such, it just kind of gets on with the job.

While light was in reasonable supply, the default settings (auto everything) left some of the images washed out, almost feeling like there is a thin, misty veil over the lens. When the sun did come out to play, though, this cleared up a treat, giving crisp and bright images. There are a selection of manual options for you to poke about with, which do give a modicum of control, and some novelty panorama / 3D modes for the occasional creative flirtation. Our guess, however, is that if you are eyeing this phone as something to potentially live with, the 5-megapixel shooter, set to

default, will do just fine for those candid moments and occasional memories you need to preserve.

It might come as no surprise, then, that video mode fares just as sufficiently. You're not going to be filming any masterpieces as some pixelation can be seen when movement is sudden, but it's adequate for YouTube fodder. All in all, it's a very average affair.

SOFTWARE

Before you groan about the out-of-the-box Android 2.3.7 install, give us a moment. Yes, it's not ICS, but that's not necessarily a crisis. Sony's skinning is pretty light, and at the top level, doesn't look all that different from the UI of Android 4.0, even if you have to squint a little bit (and choose the blue theme). In a weird interpretation of "out with the old, in with the new," Sony says that ICS will come to the Xperia U in Q2 — so very soon — but will still be hidden under its Timescape UI.

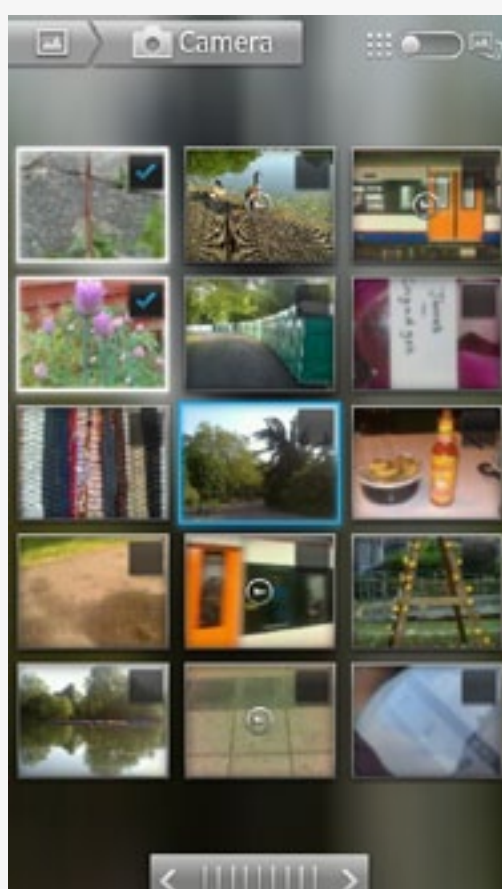
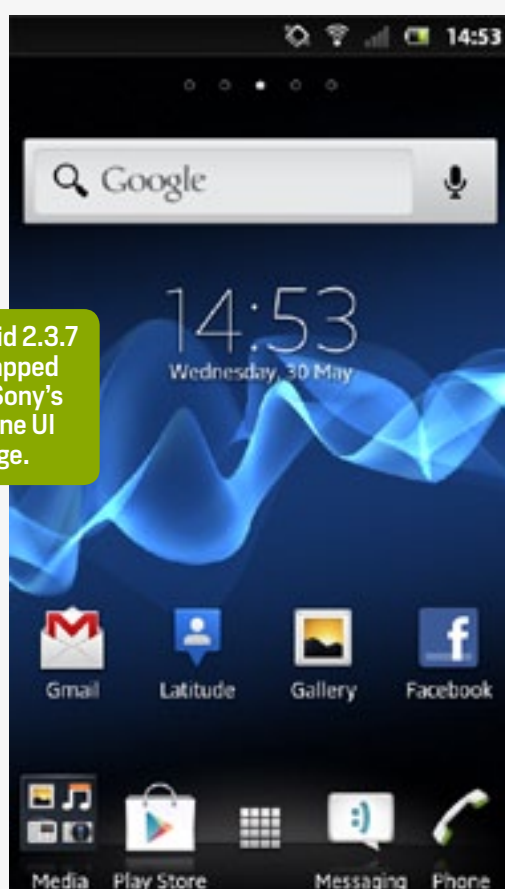
That means it'll largely look and feel the same anyway, but with the more recent features.

As is the law, the first thing you must do with a new telephone is flick the app screens left and right. No? So many snap judgements are made during those first vital seconds as you mindlessly flick left and right. Performing that less-than-scientific test here is reasonably gratifying. We already noted in our hands-

Give it some sun and the Xperia U can capture some quality shots.



Android 2.3.7
all wrapped
up in Sony's
Timeline UI
package.



But, if you're already a signed-up member of the Sony-Unlimited club, then you'll jive to the Xperia U's beat right from the off. One corner of the Sony universe that doesn't get explored, however, is its PlayStation franchise. There's nary a mention of the PS Store or PlayStation certification, which might not be surprising given that the bigger Xperia P also seems to have been left off the invite list.

If you're still in any doubt about it, the short version is that the software is more of the same that we've come to expect from the Xperia brand. There's the good (some Android 4-esque features like app folders), the bad (McAfee's persistent antivirus) and the ugly (connecting to a Mac to transfer files needs a cable and more software). The good news is that most of the stuff that you don't like can either be uninstalled or easily ignored, leaving you to mold the phone to your liking.

on, that navigation was neither zippy nor sluggish, and that about sums it up. The 1GHz dual-core ST-Ericsson U8500 processor does its best to leave your experience unhindered. That said, once you've had the phone for a while, and more and more applications compete for resources, this might start to change. For now, however, we're quite pleased with the speed and ease at which we got around the user interface.

Beyond that UI, Sony has filled the Android room with a few bits of its own furniture, notably its audio and video services. That's hardly surprising given its recent departure from long-term beau Ericsson. Now that it's got the place all to itself, it's evidently keen to leave its mark, and that means Music Unlimited and Video Unlimited take pride of place. You don't have to use these, of course, as there are other media playing options.

PERFORMANCE AND BATTERY-LIFE

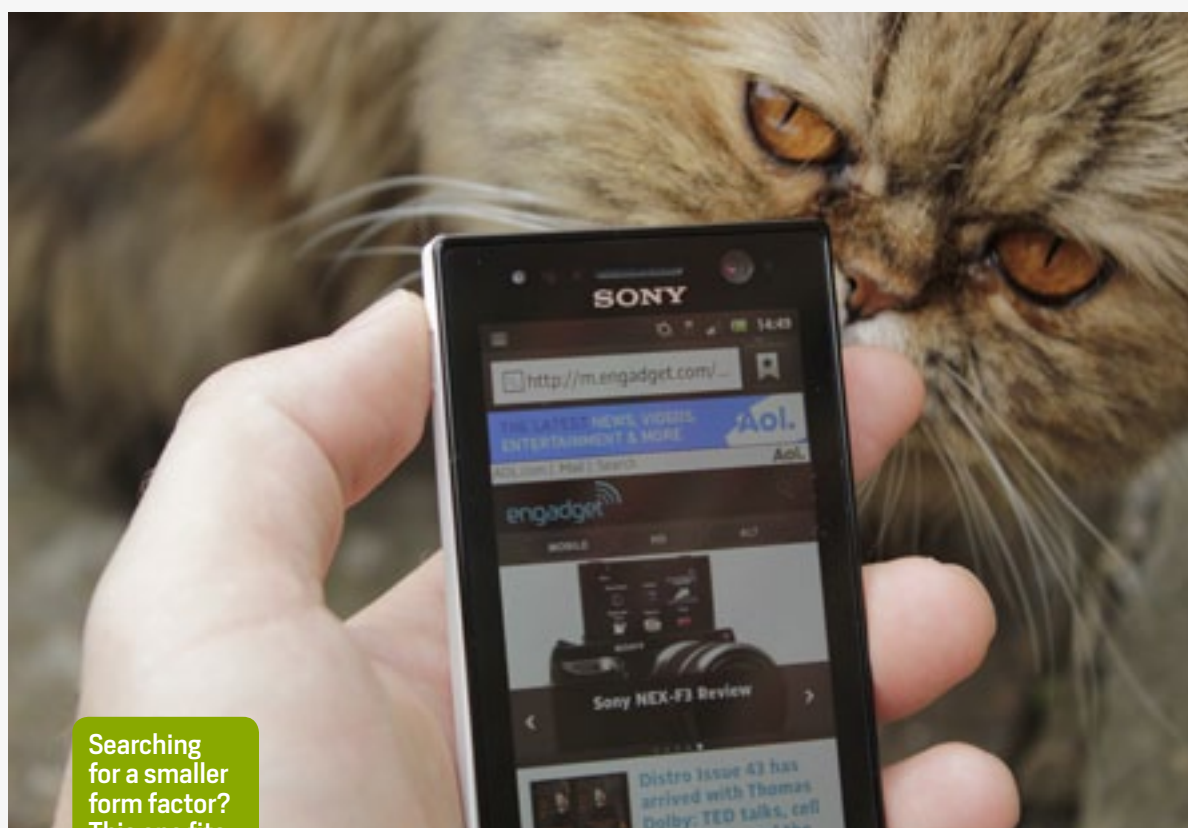
When you have less display to light-up, you stand a good chance of being able to do it for longer. The 1,320mAh battery is a sliver over that of the Xperia P's 1,305mAh, and this, factored with the lessened screen demand, do help keep the juice flowing a little longer. On our standard battery-draining test (WiFi



on, brightness at 50 percent, and a continuous video playing) the Xperia U's engine room kept it huffing and puffing for a smidgen over five hours, which is better than the P could manage, and about on a par with the larger (and more power-endowed) Xperia S. That five hours isn't all that far off of the "up to" six hours in the press materials, which obviously tend to err more on the optimistic side.

The Xperia U managed to give us nearly two days of service, before it'd start pulling at our trouser leg, asking us to feed it.

What about when you're not settling in for marathon movie sessions, which, let's face it, is likely most of the time? In our time with it, the Xperia U managed to give us nearly two days of service, before it'd start pulling at our trouser leg, asking us to feed it. This is with WiFi and



Searching for a smaller form factor? This one fits the bill.

data always on, regularly checking emails, browsing the web and, well, the typical tasks of a fairly demanding user. This means that if you're away from the security of a wall port for more than 36 hours, then you'll be fine, but you'll likely want to be charging it most nights just in case, as is unfortunately the norm.

Of course, it's not just lighting up that screen, and juggling all the radio signals that drain the battery, those dual-cores will be taking a slice of the power-pie too. Yes, this brings us onto the more measured performance, and those all-important benchmarks. In our tests, the little Xperia U equaled, or saw off its Xperia P label-mate across the board showing that there's plenty of fight in the fella. In fact, it also pushes HTC's nearest current phone into the sand on most tests.

These results are fairly congruent with our own experience. Playing *Cut the*



BENCHMARK	SONY XPERIA U	SONY XPERIA P	HTC ONE V	GALAXY S BLAZE 4G
QUADRANT	2,125	2,161	1,636	3,600
VELLAMO	870	845	1,155	1,009
ANTUTU	5,348	4,965	n/a	n/a
SUNSPIDER 0.9.1 (MS)	2,696	3,010	3,214	3,068
GLBENCHMARK EGYPT OFFSCREEN (FPS)	19	19	n/a	n/a
CF-BENCH	5,346	4,855	n/a	n/a

Rope and other such reasonable light, fluid games felt no different (bar the screen real estate) than on, say, our Galaxy Nexus. Perhaps if we literally played one after the other, differences might begin to show, but if there are any, they aren't significant enough to show on their own.

Call- and browsing-wise, the phone's quad-band GPRS (850, 900, 1800, 1900) and HSPA (850, 900, 1900, 2100) dished up solid connections throughout our repeated testing both in central London and in more rural areas. Call performance and download speeds were always in tandem with what the UK O2 network could provide.

WRAP-UP

We admit that we've spent a lot of time talking about what this phone is not. So, now we'll sum up exactly what it is. The Sony Xperia U is a good phone, if you are looking for something a little smaller. It is perfectly capable for most daily-use

situations. It plays your media well, and snaps photos and videos that will be fine for most pedestrian users. The Xperia U is perfectly nice to look at, and serviceable in almost every respect. However, it is also a little short on the internal memory front, and with no option to fix that up at your own expense. It is also a fiddle to get working with your Mac if you want to free up some of that memory in batches (which you likely will).

Those are the facts. But what about that less tangible of qualities? How we actually *feel* about it. Well, this is where the Xperia regains some merit. Despite its fairly modest specification, and occasional software quirk, it possesses some endearing characteristics. In a world where the limits of the human hand are being tested, the Xperia U fits like a pair of comfortable shoes. Likewise, the initially harsh-looking geometric form, and superfluous chin give it a distinctive (no pun intended)





The unique geometric form and color of the Xperia U.

edge over its target-market colleagues such as Samsung's Galaxy Ace 2, or HTC's One V. The kicker being that, at \$330 SIM-free, it also out-prices the above pair by around \$50. There's also the Xperia P to consider, which might command more of your money, but fixes some of our main issues with it. Ultimately it comes down to how appropri-

ate these trade-offs are to your specific requirements. And loathed as we are to agree with marketing spiel, as Sony would put it — it is all about U. **D**

James loves music and technology, especially music technology, particularly when he gets to write about it. Figures really.

BOTTOMLINE

SONY XPERIA U

\$330
(SIM-FREE)



PROS

- Smooth performance
- Bright screen
- Comfortable to use

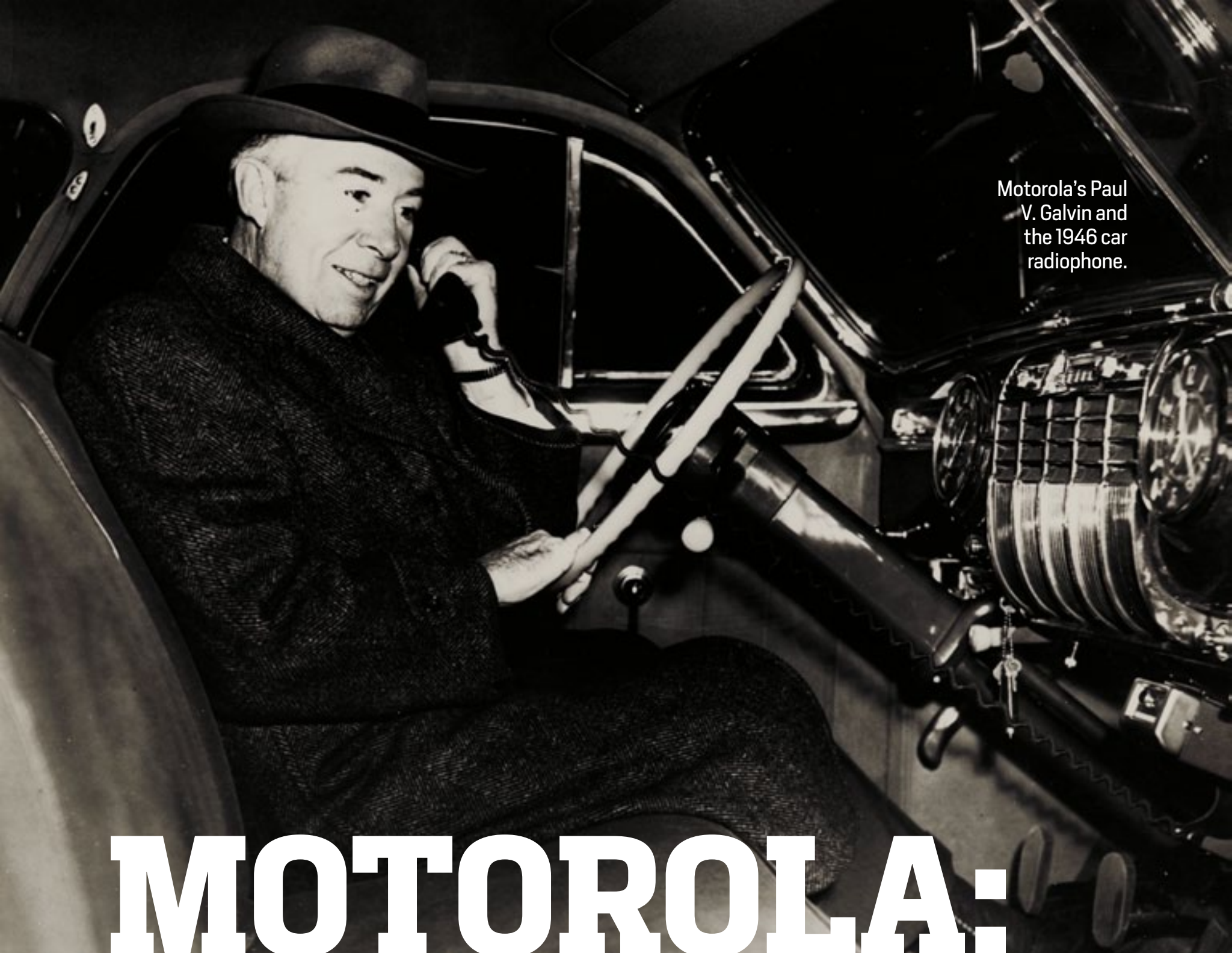
CONS

- Limited storage space
- Old Gingerbread OS
- Some minor software quirks

BOTTOMLINE

While the Xperia U might appear to be the next one down from the P, better battery life and general performance make this a worthy consideration if you have an eye for a smaller phone.



A black and white photograph of Paul V. Galvin, a man in a dark suit and bowler hat, sitting in the driver's seat of a 1946 car. He is holding a telephone receiver to his ear, smiling. The car's steering wheel and dashboard are visible.

Motorola's Paul
V. Galvin and
the 1946 car
radiophone.

MOTOROLA: A Brief History



Motorola founders Paul V. Galvin (left)
and Joseph E. Galvin, circa 1930.

From early car radios to
Star Trek-inspired
cellphones, the
company's impact on
technology goes far
beyond the flip phone.
By Brian Heater



A snapshot of the last several years in Motorola's history shows a company in flux, culminating recently, when the smartphone manufacturer's sale to Google was finally given the green light. After undergoing governmental scrutiny from the US, China and the EU, the move, priced at around \$12.5 billion, seems a logical fit, given the phone maker's push toward a portfolio built nearly

exclusively around the search giant's mobile operating system. Of course, it's hard to imagine such a transaction taking place, had the Mobility wing not been spun off from Motorola a year and a half prior.

These are the latest events for a company that has undergone a fair amount of change in its 80-plus-year existence. It's a long and fascinating story — one likely hazy at best for those who can only remember as far back as the original RAZR or StarTAC.

THE EARLY YEARS

Before it was an international telecommunications giant, Motorola was the name of a car radio. The moniker was an amalgam of sorts, the “motor” pulled from “motorcar” paired up with “-ola,” to signify sound. The Motorola car radio was released by the Galvin Manufacturing Corporation in 1930, two years after the company's founding in Chicago, kicking things off with a battery eliminator, aimed at letting battery-powered home radios run on household electricity. The

GALVIN MFG. CORPORATION

Motorola

Motorola

Motorola Inc.

Motorola Inc.

Motorola

 **MOTOROLA**

 **MOTOROLA INC.**

 **MOTOROLA**

 **MOTOROLA**

Motorola logo
evolution
from 1928 to
2001.



Right: In 1940 Galvin Manufacturing Corporation (later Motorola) engineers developed the Handie-Talkie SCR536 AM portable two-way radio. This handheld radio became an icon on World War II battlefronts. **Below:** Patent drawing filed in 1942.





Above: Motorola Handie-Talkie radio pager brochure cover, 1956. Motorola's first pager was designed to replace public address systems. **Below:** Bravo numeric pager, 1988. This device grew in popularity with doctors and "entrepreneurs" before hitting the mainstream.



Below: Motorola equipment transmitted the first words from the moon during the Apollo 11 mission in 1969. This achievement was proudly announced in a space program poster that same year.



company was launched by two brothers, Joseph and Paul Galvin, the latter of whom reportedly bestowed the car radio with its soon-to-be-famous name.

The same year it was released, the Motorola became Galvin's first internationally sold product — albeit on a fairly small scale, moving two units in Mexico City. Not an epic feat by any stretch, sure, but companies rarely become multinational presences overnight. In 1947, the company dropped the name of its founders in favor of a punchier moniker borrowed from its early car stereo — a name that meant “sound in motion,” according to the company line. A fitting switch, in light of the Galvins’ embrace of all things radio, including models for the home, police cruisers and two-way units like the Handie-Talkie, which would be put to use on the battlefields of WWII. The company wouldn’t adopt the now familiar “M” Motorola logo for nearly another decade, favoring a decidedly less iconic, cursive font for the time being.

Motorola also provided the radio technology for Apollo 11’s moon landing.

Motorola even flirted with an early version of the car phone in 1946, developing the Car Radiotelephone for Illinois Bell. Newly rechristened, the company found more success with 1947’s Golden View Television, a seven-inch set that sold at a



Motorola's DynaTAC 8000X portable cellular phone, 1983. The phone's designer, Martin Cooper, has said he drew inspiration for the device from the Star Trek communicator.



reasonable \$190. In the '60s, the company would go cordless with the 19-inch Astronaut TV, offer up color tubes and cap off the decade with another large leap — providing radio technology for Apollo 11's moon landing.

BIRTH OF THE CELLPHONE

In 1973, Motorola took some major steps toward the technology that would define it in the decades to come, showing off the DynaTAC (notoriously inspired by the Star Trek communicator) and demonstrating the phenomenon of cellular telephones to the world. It wasn't until 1984 that the brick-sized phone would actually start making its way into the hands of consumers. The 80s also saw the development of Six Sigma, a quality control strategy aimed at nearly error-free products. By the end of the decade, the MicroTAC hit the market, dropping the size and weight a good deal and shifting toward a flip phone form factor. It was succeeded in 1996 by the truly iconic StarTAC, a (relatively) tiny, "wearable" handset that popularized the clamshell design and brought the vibrate option over from the pager side of Motorola's business.

INTO THE SMARTPHONE ERA

Motorola had another giant hit on its hands with 2004's RAZR, pushing the boundaries of cell phone size — and fashion — yet again, becoming the best-selling clamshell ever made. By the end of



MOTORAZR V3
cellular phone
from 2004.

the decade, Motorola had shifted its focus to Google's Android, in a bid to get on board with the smartphone explosion set off by the iPhone and its ilk. The company attempted to put its stamp on the mobile operating system with the MotoBlur skin, much to the chagrin of users and critics. In October 2009, the company bucked the trend away from physical keyboards with the release of the Droid, an Android 2.0 slider with a Lucasfilm-licensed name that Motorola would borrow for a slew of subsequent handsets.

2004's RAZR became the best-selling clamshell ever made.

The company kicked off 2011 with a rift. After years of discussions, it was split into two parts: Motorola Solutions, an enterprise- and government-facing wing, and Motorola Mobility, specializing in handsets and set-top boxes. In August of last year, Google announced that it would acquire Mobility for around \$12.5 billion, a deal that would close nearly nine months after it was first made public. 

Brian's work has appeared in Spin, The Onion, Entertainment Weekly, The New York Press, PCMag and Laptop.





BIG 10

BREAKOUTS FROM WWDC 2012

Apple wasn't shy at this week's WWDC keynote. In fact, there was so much news coming out of San Francisco's Moscone Center we thought it only fitting to bring you a guide to the biggest breakouts from opening day. Without further ado, we present you with the bitten fruit's 10 most important announcements.

By Engadget Staff





THE NEXT-GENERATION MACBOOK PRO

Apple had a surprise in store for its big WWDC hardware announcement: the next-generation MacBook Pro. It packs a **Retina display** with a **2880 x 1800 resolution (or 220ppi)**, and a casing that measures just 0.71 inches thin and weighs 4.46 pounds. You can get up to 16GB of RAM, NVIDIA Kepler GT 650M graphics, up to a quad-core 2.7GHz Core i7 processor, a maximum 768GB of storage (SSD, naturally) and a promised seven hours of battery life. One spec nowhere to be seen: an optical drive. Pricing starts at **\$2,199** for a 2.3GHz unit with 8GB of RAM and 256GB of storage, and it's **shipping now**.

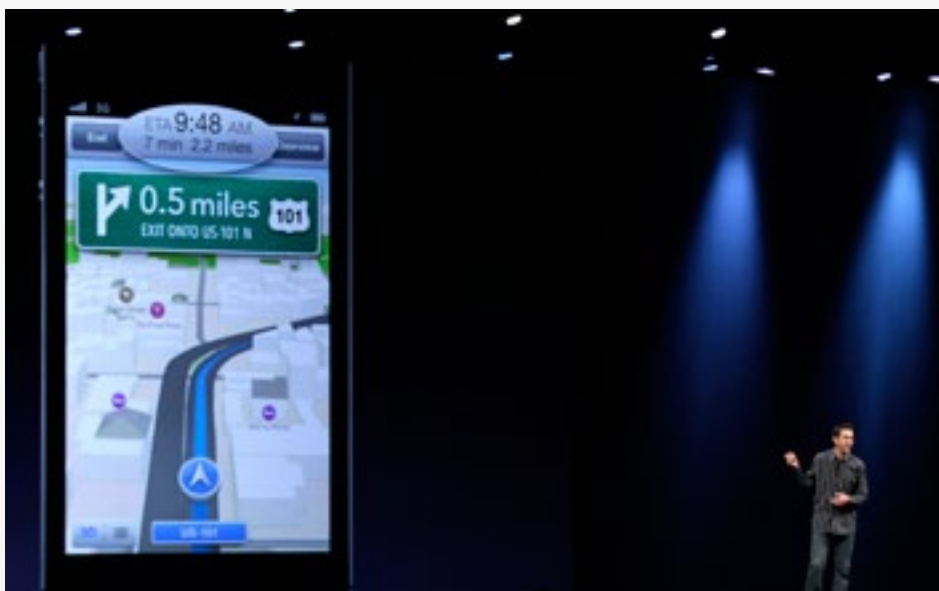
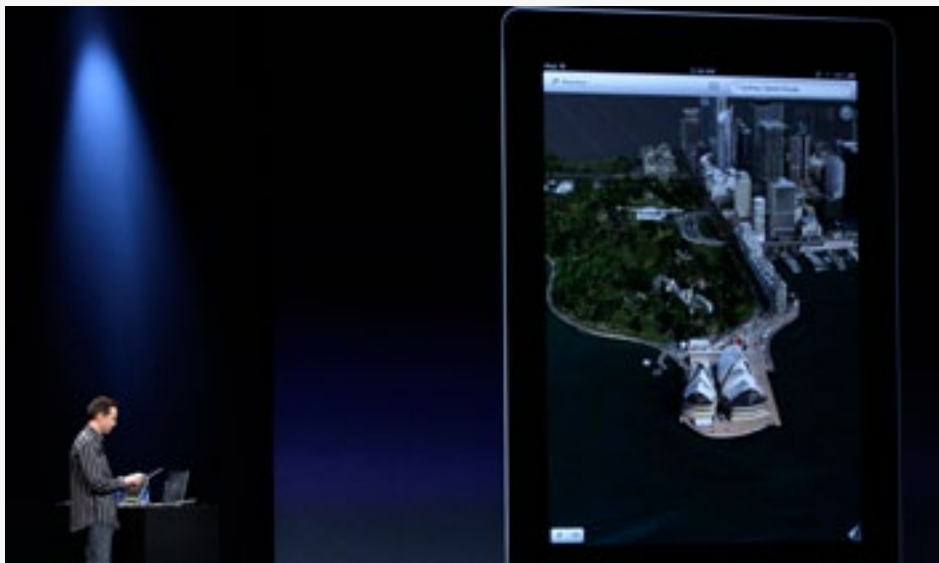


IOS 6 UNVEILED

Looks like they didn't print the banner out for nothing. Cupertino also took the shiny cling wrap off of the latest version of iOS. What's new? Well, at least 200 things! Most notably, Siri got a little makeover, including the ability to launch apps and display her knowledge of sports, restaurants and movie times. There's better Facebook integration too — with photos, websites, maps and more getting the instant share option. Other tweaks on the phone side of things let you dismiss incoming calls with a swipe, reply with a pre-written SMS or even set it to give you a reminder once you change location. Another popular feature will be "Do Not Disturb," which holds off all those notifications. You'll still get them, but they won't alert or light up the screen. Sharing images also just got easier with shared Photo Streams — choose the pictures, choose the friends.



APPLE LAUNCHES ITS OWN MAPS APP



It's been one of the big questions hanging over WWDC — will Apple actually toss Google to the side and launch its own mapping service specifically for iOS? Well, it's not a question anymore, but a cold hard fact. Apple's mapping solution is here, taking over where Google left off. The new Maps app includes all of the features you've come to expect from the previous iOS solution, but with a number of enhancements. This all-new mapping solution includes 100 million different business listings, Yelp integration and, most importantly, turn-by-turn navigation (on select iDevices). The maps are even rendered in full 3D, not unlike what Google announced last week.





OS X MOUNTAIN LION LANDING SOON

You got it. The latest version of Mac OS X is coming in a matter of weeks, and will set you back just shy of \$20. If any of those new, beastly Ivy Bridge-decked machines made you reconsider your bank balance, breathe a [small] sigh of relief — you’ll be treated to a free upgrade if you decide to buy one before Mountain Lion arrives in July. Also, you’ll be able to pay one price to bring all of your Apple machines up to date.

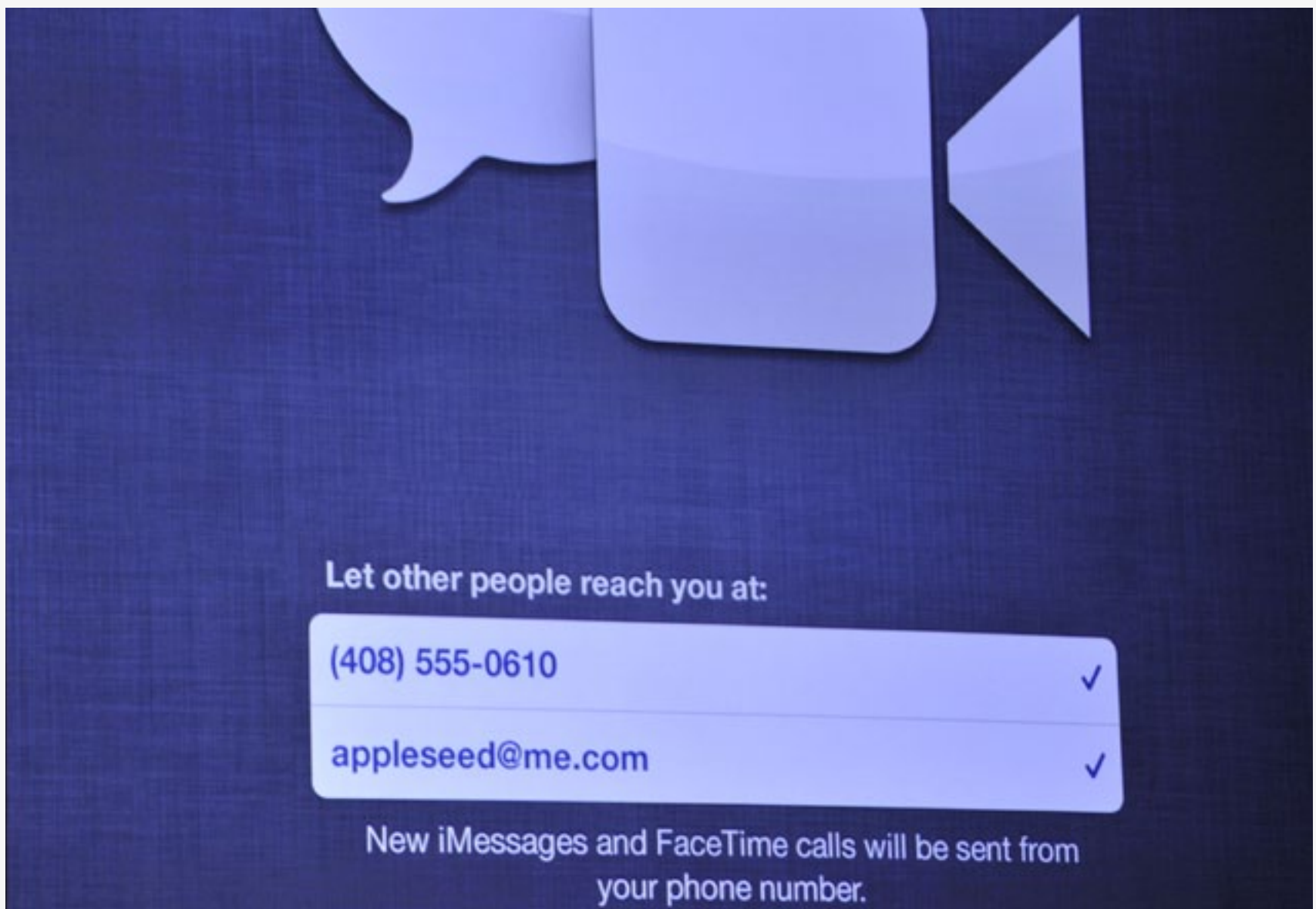
IVY BRIDGE MACBOOK PRO

The MacBook Pro received more than one new iteration this year, with refreshes of its non-Retina rigs sporting Intel’s newer Ivy Bridge processors. The 15-inch portable sports up to 2.7GHz quad-core Core i7s (turbo up to 3.7GHz), while the 13-inch models feature dual-core i5s or i7s, topping out at 2.9GHz (turbo up to 3.6GHz). They carry up to 8GB of RAM, have GeForce GT 650M-based graphics and tout USB 3.0 ports. Apple is asking \$1,099 for the base 13-inch and \$1,799 for a 15-inch — sadly, it seems lovers of the big screen won’t see a new 17-incher this time around.



15-inch MacBook Pro	
1440 x 900 display	1440 x 900 display
2.3GHz quad-core i7	2.6GHz quad-core i7
4GB RAM	8GB RAM
GeForce GT 650M 512MB	GeForce GT 650M 1GB
500GB HDD	750GB HDD
7 hours	7 hours
0.95", 5.6 lbs	0.95", 5.6 lbs
\$1799	\$2199





FACETIME GOES CELLULAR

We've been waiting for it, and Apple surely took its sweet time giving it to us. But at WWDC 2012, **FaceTime** was finally let loose from its WiFi bonds, leaving us all free to **video chat over cellular data**. This is great news for all those Apple fans who resolutely refused to use similar services from Skype, Tango or Google, that have been around for ages now. Pretty soon, you'll be able to provide play-by-play during your Yosemite hikes to further incite jealousy amongst your mates. As for us? Well, we'd say it's better late than never.



EYES FREE: SIRI CAR INTEGRATION

Apple's VP of iOS Software Scott Forstall demoed Eyes Free, Siri's new vehicle integration. The feature is being framed as a safety booster, letting you tap a steering wheel-mounted button to toggle Siri on your iOS device, rather than reaching around for your iPhone or iPad and taking precious seconds away from the road. This being Apple, there are already plenty of partners lined up — BMW, GM, Mercedes, Land Rover, Jaguar, Audi, Toyota, Chrysler and Honda are all said to be on board, with Siri support making its way to vehicles within the next 12 months.



SIRI COMES TO THE NEW IPAD

Forstall also announced that Apple is bringing Siri to the new [third-generation] iPad as part of iOS 6. Sometime this fall, you'll be able to schedule meetings and much more with the help of Cupertino's favorite personal assistant. It remains to be seen what sort of slate-only capabilities (if any) the company will offer for Siri, but the tech is sure to come in handy with several everyday tasks. We're hoping that we'll be able to snag Red Sox tickets or access our airline documents in Passbook without lifting a finger.



IVY BRIDGE MACBOOK AIR

The move to Ivy Bridge processors wasn't the only update for Apple's skinnier, lighter MacBook option. First up, those processors reach up to **2GHz Core i7**, with Turbo Boost tipping these up to 3.2GHz. The **FaceTime camera is now 720p**, with the display on the 11-inch model staying put at 1366 x 768 (but with Intel's HD 4000 pushing the graphics). The 13-incher houses a 1440 x 900 screen. Both ship with **USB 3.0** ports and are ready for up to 8GB of RAM. Storage now extends to 512GB, while prices start at \$999. The best part? They're already shipping.

13-inch MacBook Air	
1440 x 900 display	1440 x 900 display
1.8GHz dual-core i5	1.8GHz dual-core i5
4GB RAM	4GB RAM
Intel HD Graphics 4000	Intel HD Graphics 4000
128GB flash storage	256GB flash storage
7 hours	7 hours
0.11–0.68", 2.96 lbs	0.11–0.68", 2.96 lbs
	\$1499





GUIDED ACCESS FOR IOS DEVICES

Apple made a move toward, well, accessibility with **Guided Access for iOS**, which lets folks limit the input that devices are able to respond to. The company provided potential uses such as: a parent of an autistic child disabling on-screen controls so their child doesn't accidentally exit an app, a teacher preventing students from exiting a test app, or museums keeping folks locked in on in-house apps. This includes the ability to **confine touch input to certain parts of the screen**, in addition to **disabling the home button or touch input altogether**.



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VISUALIZED

STAR TRAILS FROM THE ISS

NASA astronaut Don Pettit was able to capture some striking imagery while aboard the International Space Station. Using a digital shooter, he sidestepped the problem of electronic detector noise washout by keeping exposure at 30-second intervals and layering the results to produce vivid cyber spacescapes.

NASA_JSC_PHOTO/FLICKR



TIM KRING



The Emmy-nominated writer / producer and creator of shows like *HEROES*, *TOUCH* and the web series *DAYBREAK* takes time to tell us why size matters.

What gadget do you depend on most?
My laptop (only because I make my living on it), followed closely by my mobile phone.

Which do you look back upon most fondly?
The desktop computer. It's a concept that's totally foreign to me now.



“I owned the original Sony Walkman and I honestly think that getting it was the biggest technology related thrill I’ve ever had.”

Which company does the most to push the industry?

Normally, I’d say Apple without hesitation here. But as I think about the question in a more complex industry in mid-2012, it’s not at all clear to me who’s pushing and who’s chasing anymore.

What is your operating system of choice?

Apple...for now.

What are your favorite gadget names?

All of the ones that start with “i”. (So I guess I’m still pretty solidly in the Apple camp.)

What are your least favorite?

I’m sure there’s some kind of Edsel-type gadget that I’ve owned, but I must have blocked them out of my mind.

Which app do you depend on most?

I love the New York Times app, but I also use my phone to check the weather somewhat obsessively, especially when on location.

What traits do you most deplore in a smartphone?

Having to wait a long time when downloading attachments, Web pages or apps. I also hate dropping calls.

Which do you most admire?

The portability of a modern smartphone. It’s pretty incredible how much you can do from a device that is small enough to go anywhere with you.

What is your idea of the perfect device?

One that makes me smarter, funnier and better looking. (Still looking for one of these.)

What is your earliest gadget memory?

I owned the original Sony Walkman, and I honestly think that getting it was the biggest technology-related thrill I’ve ever had.



What technological advancement do you most admire?

The Internet.

Which do you most despise?

Call waiting.

What fault are you most tolerant of in a gadget?

Physical looks. Although size matters.

Which are you most intolerant of?

A poorly designed user interface.

When has your smartphone been of the most help?

It was 3 AM and I was in To-

kyo doing publicity for *Heroes*. I had had a bit too much to drink, couldn't find my hotel, and without my phone I would have been completely lost.

What device do you covet most?

Much to my wife's chagrin, I usually end up buying every device I think I might want. So I kind of skip the "covet" step, I guess.

If you could change one thing about your phone what would it be?

I'm looking forward to handsets with faster processing speed.


What does being connected mean to you?

Please see my answer to Question 16 [at top] and note the fact that I am not, in fact, still hopelessly lost in Tokyo.

When are you least likely to reply to an email?

When I see someone cc'd on the note and know that person can answer for me.

When did you last disconnect?

Hmm. I feel like it was sometime in 2002. Maybe it's been longer. Honestly, I'm not much for disconnecting. 

“It was 3 AM...
I had had a bit
too much to
drink, couldn't
find my hotel,
and without my
phone I would
have been
completely lost”



Going Thermonuclear

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SWITCHED
ON

BY ROSS RUBIN

At the debut of the T-Mobile G1, Switched On identified the central conflict that would quickly tear apart the goodwill between Apple and Google. In fact, in Steve Jobs' authorized biography, Walter Isaacson quotes the late Apple CEO on Android, noting that he was prepared to "go thermonuclear war" on the iOS competitor. Indeed, the first WWDC since Jobs' death was filled with enough anti-Google swipes to smudge every iPhone screen in Moscone West. But the verbal lashings were nothing compared to the beating back that Google and Android took in relation to iOS 6 feature announcements.

SIRI EXPANSION

Apple could have significantly increased its content and service partnerships or opened a Siri API to developers. It did neither, but opted instead to extend its domain expertise, showing off sports, movies and restau-

rant reservations. In tackling sports and location, Apple moves further into leveraging Siri as a search end-run and moves toward integrating search and transactions (see: Passbook).

The company has also started an ambitious program of integrat-



ing a Siri button into car steering wheels and announced nine auto-making partners including Audi, Mercedes, GM, Toyota and Honda. This is clearly intended to take the iPod dock integration with which Apple was so successful to the next level and poses a challenge to the Sync system Ford has developed with Microsoft.

FACEBOOK INTEGRATION

Seeking to make the iPhone the best Facebook experience on a smartphone, Apple has apparently been able to get back to the negotiating table with Facebook and integrated the social network in its mobile and desktop operating systems. In fact, Facebook has been embedded more deeply than Twitter, although this is in part due to Facebook simply being a richer service.

MAPS OVERHAUL

Apple has finally rolled out the long-rumored replacement for the Maps application and integrated free turn-by-turn directions. Nice touches include Siri integration, on-the-fly local resources and rerouting. Navigating with 3D building visualizations, sometimes a tricky endeavor, seemed to work well.


PASSBOOK E-WALLET FORAY

Continuing the transaction trend driven with Siri, Apple has moved tentatively into the e-wallet space with

“Facebook has been embedded more deeply than Twitter, although this is in part due to Facebook simply being a richer service.”

Passbook, which aggregates loyalty cards and tickets. Most of the activity seemed to focus on QR codes but Apple may be setting the stage for an NFC-equipped iPhone.

WWDC sure looked a bit like the Android armageddon. Apple is circumventing search with Siri, taking on Google Maps, beginning to move against Google Wallet (tentatively, for now) and cozying up with Google rival Facebook. Even integrating Apple ID with phone numbers may cause challenges for Google Voice users.

But also in these instances, and in many cases beyond these features, there's a strong customer-focused argument for why Apple chose implementation. Only a foolhardy company would let revenge be the driving force behind product development. On the other hand, one can see how Apple might want to take control of navigation on iOS and avoid having Google know what's needed to integrate maps with Siri for competitive reasons. After all, an ice cream sandwich is not the only dish best served cold. 



The week that was,
in 140 characters or less.

WWDC, READABILITY AND PINTE-WHAT?

@zpower

a hat-tip for the first
company to introduce
“retina speakers” for
“high-definition audio.”

@nickbilton

You can tell it’s a room full of
nerds here. Demo of car
game on Mac erupts in cheers.
Demo of new Siri explaining
sports stats: silence.

@kabster728

Imagine you’re the lion in the
Lion OS photo. Or the Mountain
Lion in that OS’s photo.
You’re like the Justin Bieber of
jungle cats! #WWDC

@mattbuchanan

Oh insta-
readapocket-
ability

@fruhlinger

I still don’t get
Pinterest. Can
someone explain
it to me in 140
characters?

THE STRIP


BY DUSTIN HARBIN



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MACHINES

WHAT IS THIS? TAP  TO FIND OUT



AP PHOTO / THANASSIS STAVRAKIS



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TIME MACHINES

ANTIKYTHERA MECHANISM

MODERN
EQUIVALENT:

Texas Instruments
TI-30X IIS



Not too shabby for a 2,000-year-old calculator, eh? Dubbed the oldest known scientific calculator in existence, the Antikythera mechanism is made of a collection of 30 gears and was reportedly used by ancient greeks to track the cycles of the solar system. While its successor, the ubiquitous TI number cruncher, can be found in backpacks all over the world, sponge divers discovered this rare gem off the island of Antikythera in 1901.

PHOTO BY MOGI VICENTINI



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